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AUTHOR McCarthy, Patricia; And Others
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ABSTRACT

Attitudes of 50 kindergarten and 50 first grade students with normal hearing toward peers wearing hearing aids were examined. Students viewed eight pictures depicting children in various conditions of hearing aid use (standard body aid, post-auricular aid, in-the-ear aid, and no hearing aid). For each picture, Ss were given nine sets of bipolar adjectives and asked to make a choice for each. Results suggested that the presence or absence of a hearing aid was not perceived uniformly but rather differed for individual conditions according to whether the respondent was a kindergartener versus a first grader or male versus a female. It was hypothesized that responses may have been based on physical attributes of the children in the picture. (CL)

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Peer Perceptions of Kindergarten and First-Grade Hearing Aid Wearers

Patricia McCarthy, Ph.D.
Debra Hall, M.Ed.
University of Georgia

Richard Peach, Ph.D.
Emory University School of Medicine

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When hearing-impaired children are mainstreamed into a regular classroom, many factors can influence whether this transition will be a success. One salient factor which contributes to this success is the degree of handicap perceived by teachers and peers. Recent investigations regarding such perceptions have documented a negative bias towards hearing aid wearers among teachers, lay observers, audiologists, speech-language pathologists and other children.

Fisher and Brooks (1981) found that elementary school teachers have stereotyped images of children with hearing aids. In teachers' listings of the characteristics of these children, undesirable traits outnumbered desirable traits by a ratio of 3.5:1. Furthermore, of the undesirable traits only two were educationally related while 16 were emotionally or socially based.

Blood, Blood and Danhauer (1977; 1978) found that lay judges rated intelligence, achievement, personality and appearance of adolescents more negatively when they wore hearing aids. They labeled this phenomenon the "hearing aid effect." In a follow-up study, Danhauer, Blood, Blood and Gomez (1980) examined the effect of size of the hearing on the ratings of preschool children wearing hearing aids. They found lay observers showed a bias against the size of the aid while audiologists and speech-language pathologists exhibited negative impressions whenever an aid was present, regardless of size. In a recent study, Dengerink and Porter (1984) found the "hearing aid effect" among fifth and sixth-grade students. Children wearing hearing aids were rated more negatively on appearance and achievement by their peers.

Given these findings, one may question when these negative attitudes develop. Do children just entering school possess these prejudices or are these attitudes acquired when children are exposed to them? In order to determine if the "hearing aid effect" exists at the level of school entry, this study investigated the attitudes of kindergarten and first-grade students towards peers wearing hearing aids. In addition, the effects of gender were examined. It was hypothesized that these attitudes are a learned behavior acquired after they enter school.

METHOD

Subjects

Subjects were 50 kindergarten and 50 first-grade children enrolled in a public school in rural Georgia. (SLIDE) In the kindergarten group, there were 26 males and 24 females. In the first grade group, 24 subjects were males and 26 subjects were female. Hearing screening had been conducted by the school district prior to this research and there were no identified hearing-impaired children in the classrooms.

Stimuli

Visual stimuli were 8 colored 8 1/2" x 11" photographs taken with a 35mm camera. (SLIDE) The set of pictures included one male and one female depicting the following conditions: (a) standard body aid; (b) post-auricular aid; (c) in-the-ear aid; and (d) no hearing aid. The children selected for the pictures

were kindergarteners and first-graders from a neighboring school district. Similar sitting posture, facial expression, lighting, dress and monural hearing aid positioning were maintained for each picture.

Rating Scale

The rating scale consisted of nine bipolar adjectives selected to evaluate certain psychosocial attributes including appearance and achievement. The adjectives were selected to represent positive versus negative traits. (SLIDE) First grade teachers were consulted to insure that these adjectives were within the vocabulary levels of the average kindergarten or first grade child. In previous investigations of the "hearing aid effect," observers rated stimuli using a semantic differential scale (Danhauer et. al., 1980; Dengerink and Porter, 1984). However, because of the difficulty of this task for young children, a forced choice format was used.

Procedure

Each group of subjects viewed the pictures depicting children in various conditions of hearing aid use. The eight stimulus pictures were presented in random order. For each picture, the subject was given 9 sets of bipolar adjectives and asked to make a choice for each. All directions were given verbally and the examiner recorded the verbal responses of the subjects.

Each subject's score represented the number of positive responses given for each stimulus picture. The maximum score for each picture therefore, was nine.

RESULTS

The data were analyzed using a 3 factor mixed design with repeated measures on one factor. (SLIDE) The between subjects factors consisted of two levels of grade, kindergarten and first-grade, and two levels of sex, male and female. The within-subjects factor consisted of 8 conditions of hearing aid usage.

The results of the analysis of variance suggested no main effects for grade or sex and no significant interaction between these factors. However, the first-order interactions between grade and condition and sex and condition were significant. This result suggested that the presence or absence of a hearing aid was not perceived uniformly by these subjects, but rather differed for individual conditions according to whether the respondent was a kindergartener versus a first-grader or a male versus a female. Each stimulus condition was analyzed separately therefore to determine how the factors of grade and sex influenced the judgements for the presence or absence of a hearing aid. The mean rating under each condition are displayed in Figure 1 for the four groups, that is, the kindergarten males, the kindergarten females, the first-grade males, and the first-grade females. When considering each stimulus, sex and grade were found to significantly interact, but only for the condition in which the boy without the hearing aid was presented.

As can be seen, kindergarten males rated this picture higher than kindergarten females or male and female first-graders. Grade and sex did not interact for any other of these stimulus conditions.

Main effects were also observed for grade and sex which varied across stimulus conditions. (SLIDE) When analyzing the influence of grade, it was observed that the kindergarteners gave significantly higher ratings than the first-graders to the boy with no hearing aid, the girl with an in-the-ear aid and the girl with no hearing aid. First graders, on the other hand, rated the boy with the body aid higher than did the kindergarteners. (SLIDE 7) With regard to sex, males gave significantly higher ratings to the boy with the in-the-ear aid than did females. Also females rated the girl without a hearing aid significantly higher than did the males.

DISCUSSION

It appears from these data that the effects of grade and sex per se do not influence the way these children rated their peers wearing hearing aids. While there were individual differences for the separate conditions, no definitive patterns emerged in the way kindergarteners or first-graders in this study responded to the experimental conditions. That is, the presence or absence of a hearing aid did not influence the ratings. Therefore, these results do not support the presence of the "hearing aid effect" among kindergarteners and first-graders.

As the data suggests, these subjects did make differential judgements in their ratings of these stimulus pictures. However, it appears these ratings were made on the basis of a factor other than hearing aid use. One possibility is that responses may have been based on the physical attributes of the children in the pictures. Evidence for this is found in the fact that the picture of the girl without a hearing aid consistently received lower ratings than any of the other stimulus pictures.

It should also be noted that in previous study of the "hearing aid effect", a semantic differential rating scale has been used while in this study a forced-choice format was used. This format may have contributed to the difference in the results of this study as compared to the previous studies. Perhaps the forced-choice format was too restrictive and not sensitive enough to pick up negative attitudes towards the hearing aid wearer. Future research should focus on alternative methods of eliciting the attitudes of children this young.

The findings of this study raise several questions. First, if kindergarten and first-grade children do not make negative judgements on the basis of hearing aid use, is there a way to prevent development of these attitudes? In-service preparation of teachers and peers prior to placement of a hearing-impaired child in a classroom is a viable suggestion. Second, given the findings of this study, at what age do children acquire the negative attitudes towards hearing aid use found in 5th and 6th graders by Dengerink and Porter? The answer to this question has important implications for when intervention strategies should be

developed. Third, the subjects in this study were from lower-middle income rural homes. Would children of the same age but from higher income, more affluent homes exhibit the "hearing aid effect"? Finally, how do hearing-impaired children perceive their peers who do not wear hearing aids? The answers to these questions should be the focus of future research efforts in this area.

In summary, the results of this study support the fact that negative attitudes towards hearing aid use develop at some point beyond school entry. As such, there is reason to believe that these negative attitudes can be prevented. Therefore, it appears that our efforts in dealing with the "hearing aid effect" should be directed at prevention rather than modification of these negative attitudes to implement successful socialization of mainstreamed hearing-impaired children.

Bibliography

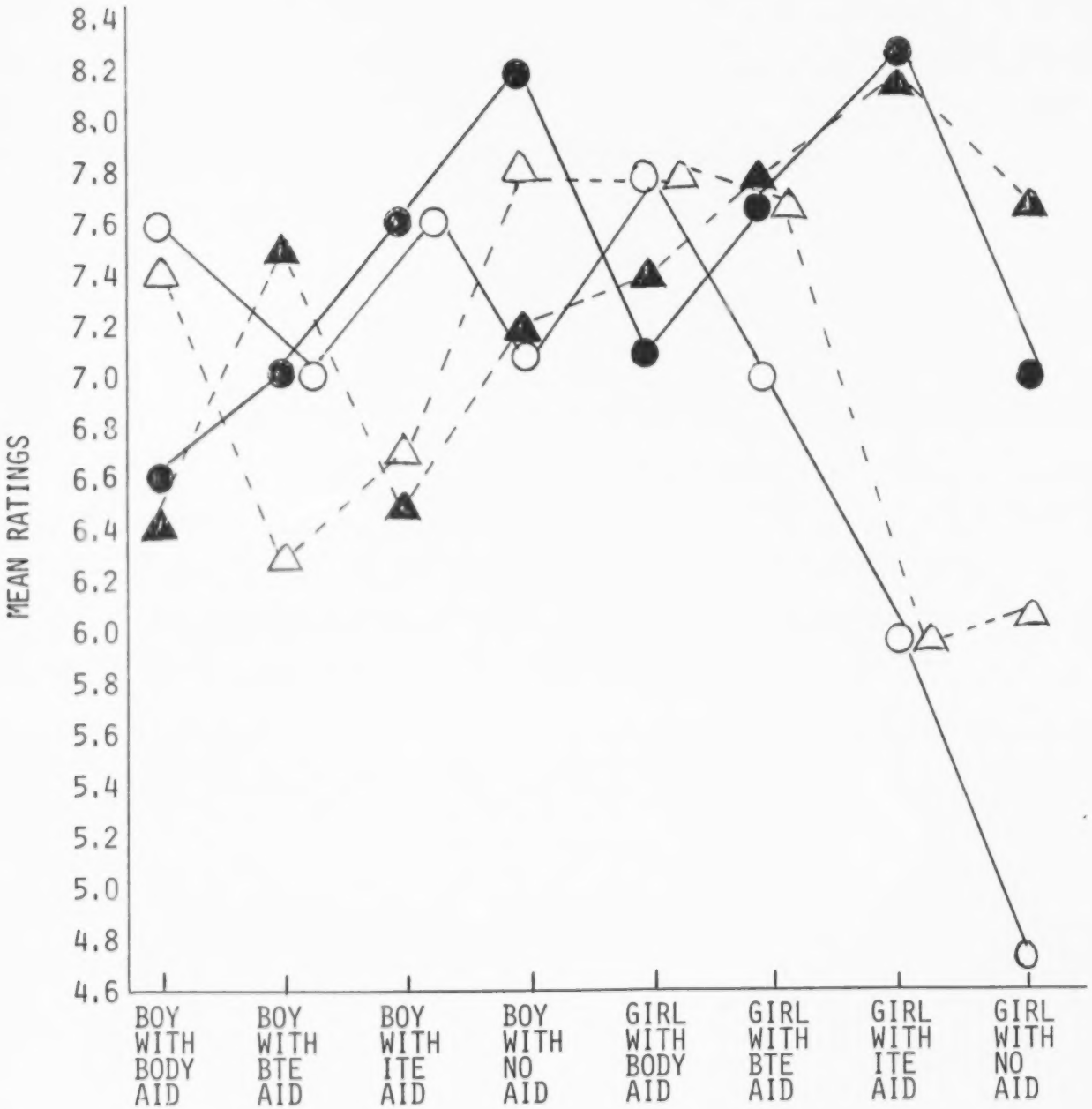
Blood, G. W., Blood, I. M. and Danhauer, J. L. (1977). The hearing-aid "effect." Hearing Instruments, 20, 12.

Blood, G. W., Blood, I. M., and Danhauer, J. L. (1978). Listeners' impressions of normal-heraing and hearing-impaired. Journal of Communication Disorders, 11, 513-518.

Danhauer, J. L., Blood, G. W., Blood, I. M. and Gomez, N. (1980). Professional and lay observers impression of preschoolers wearing hearing aids. JSHD, 45, 415-422.

Dengerick, J. E. and Porter, J. B. (1984). Children's attitudes towards peers wearing hearing aids. Language, Speech and Hearing Services in Schools, 15, 205-209.

Fisher, C. G. and Brooks, K. (1981). Teacher's stereotypes of children who wear hearing aids. Language, Speech and Hearing Services in Schools, 12, 139-144.



KEY: ○ = MALE FIRST-GRADERS

△ = FEMALE FIRST-GRADERS

● = MALE KINDERGARTENERS

▲ = FEMALE KINDERGARTENERS

FIGURE 1. MEAN RATINGS FOR EIGHT STIMULUS CONDITIONS BY GRADE AND SEX.

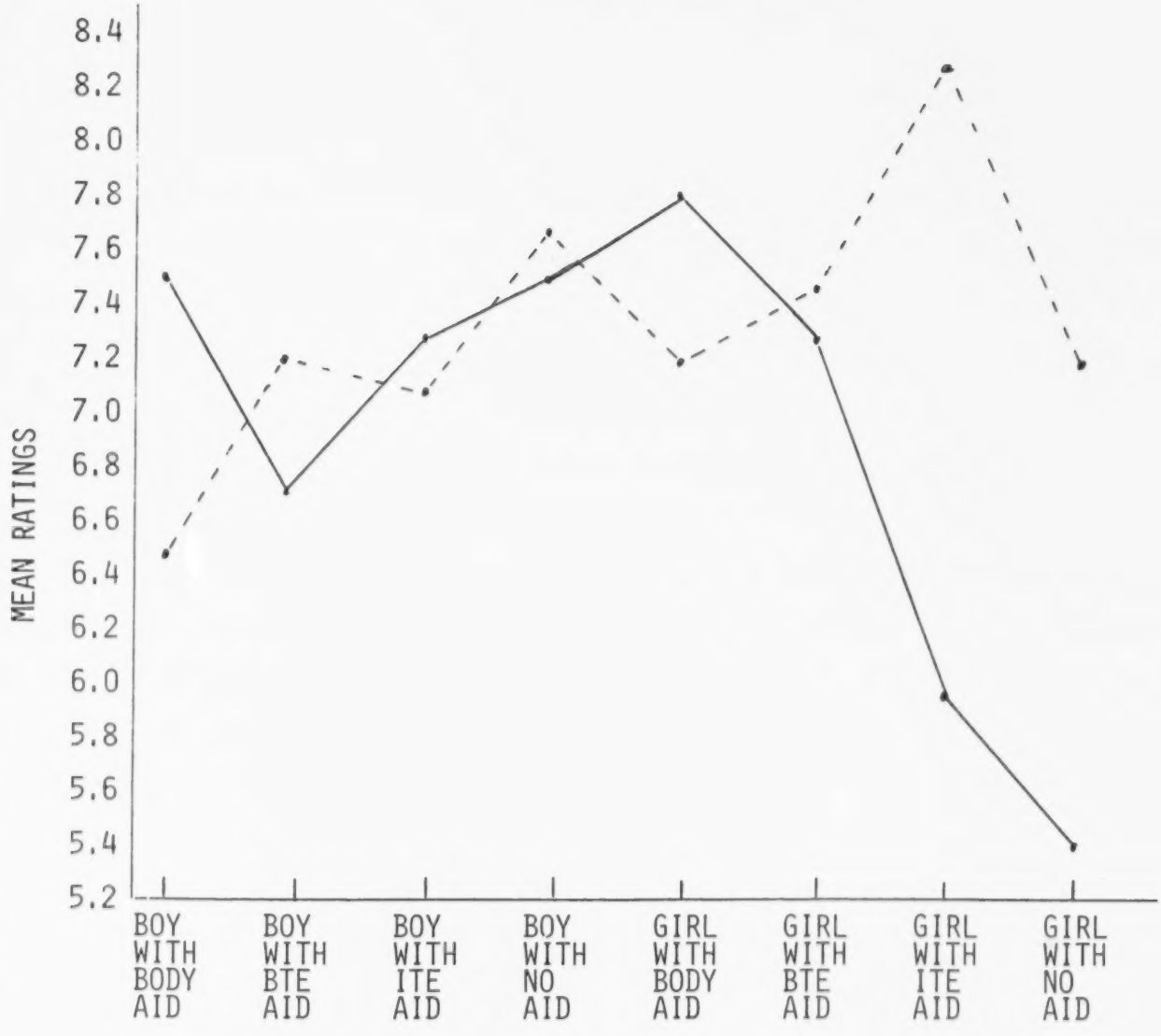


FIGURE 2. MEAN RATINGS FOR EIGHT STIMULUS PICTURES BY GRADE.

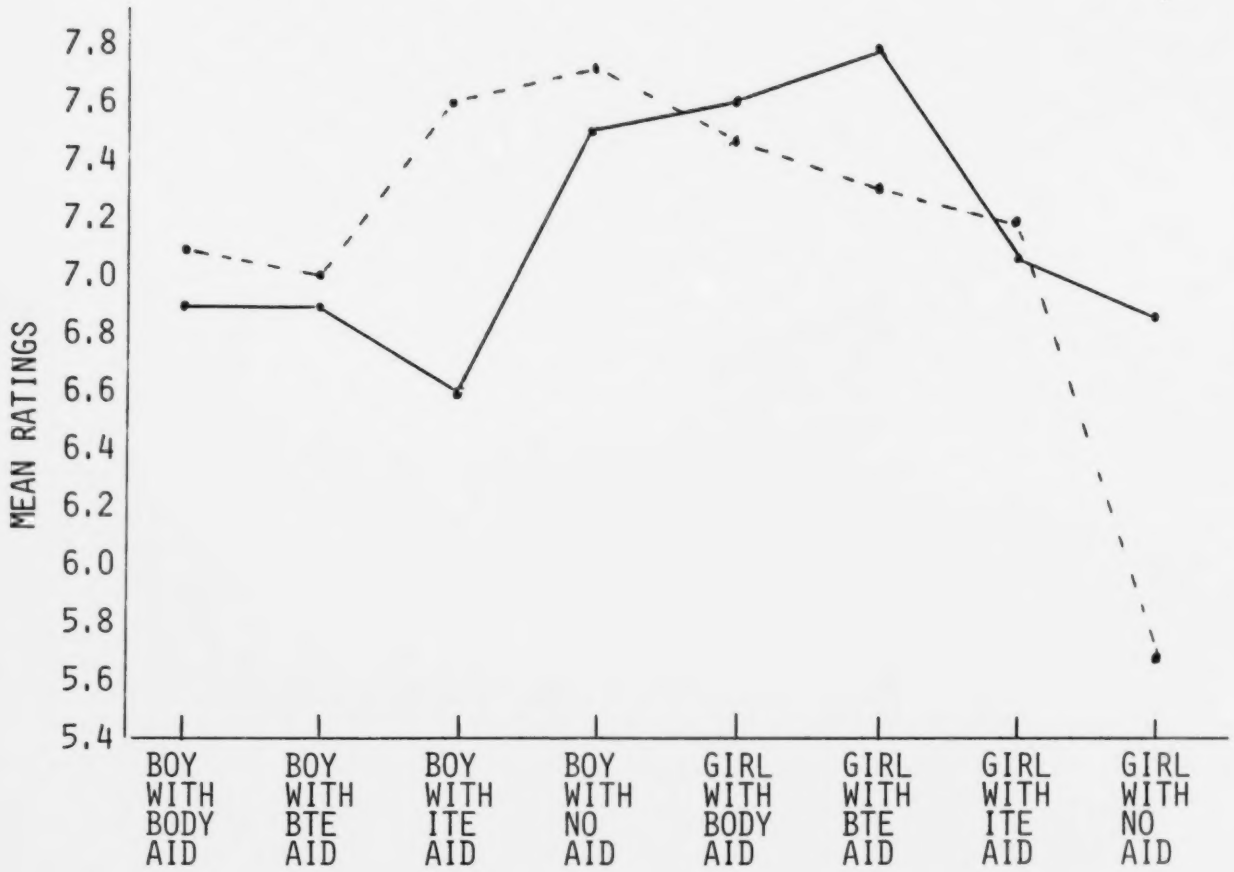


FIGURE 3. MEAN RATINGS FOR EIGHT STIMULUS CONDITIONS BY SEX.